

What is claimed is:

1. A bulk degaussing apparatus for erasing various sizes of magnetic media, comprising:

a plurality of fixed magnetic poles predisposed across a gap, providing means to project magnetic flux across said gap, and

5 a spacer for spacing of such poles at roughly equal intervals or sets of similar intervals across the gap, forming a set of fields at staggered intervals across the width of media passage, such that every point in media passing linearly through the gap passes through either a field resulting from adjacent poles that changes direction over the course of passage, or different
10 fields from different sets of adjacent poles that differ in direction, or both, and

a guide adapter for constraining the location of media passing into or through the gap formed by the plurality of poles to the effective degaussing regions formed between the poles.

2. The apparatus as recited in claim 1, further comprising supplementary fixed poles of substantially different configuration than the plurality of poles and intended to produce any magnetic field direction not produced by the primary plurality of magnetic poles and associated
5 magnetic fields.

3. The apparatus as recited in claim 1 or claim 2, further comprising adjustment means adapting the gap between the poles to different media thickness.

4. The apparatus as recited in claim 1 or claim 2, further comprising an accessory for supplementary restriction of different media form factors to more effective regions of the degaussing fields.

5. An apparatus as recited in claim 4, wherein said accessory introduces media with magnetically attractive components into the field and extracts such media from the field.

6. A bulk degaussing apparatus for erasing various sizes of magnetic media, comprising:

a plurality of fixed magnetic poles formed by assembly of electromagnet or permanent magnet and iron elements predisposed across a gap, providing means to project magnetic flux across said gap, and

a spacer for spacing of such poles at roughly equal intervals or sets of similar intervals across the gap, forming a set of fields at staggered intervals across the width of media passage, such that every point in media passing linearly through the gap passes through either a field resulting from adjacent poles that changes direction over the course of passage, or different fields from different sets of adjacent poles that differ in direction, or both, and

a guide means for constraining the location of media passing the gap formed by the plurality of poles to the effective degaussing regions formed between the poles.

7. A bulk degaussing method for erasing various sizes of magnetic media, comprising:

providing a plurality of fixed magnetic poles formed by assembly of electromagnet or permanent magnet and iron elements predisposed across a gap, providing means to project magnetic flux across said gap, and

placing of said poles with partial overlap of facing poles on opposite sides of the pathway established for media passage.

8. The method as recited in claim 7, comprising a serial arrangement of at least two multi-poled degaussing regions, differing in their orientation so as to avoid regional weaknesses of singular arrangements.

9. The method as recited in claim 7, comprising a serial arrangement of two or more multi-poled degaussing regions, differing in their arrangement, so as to avoid regional weaknesses of singular arrangements.

10. The method as recited in claim 7, wherein said magnetic poles are provided having an aspect of approximately unity.

11. A bulk degaussing apparatus for erasing magnetic media, comprising:

a plurality of fixed magnetic poles predisposed across a gap for projecting magnetic flux across said gap, spacing of said poles at intervals across the gap, forming a set of fields at staggered intervals;

a media passage, such that every point in media passing across the width of said media passage is exposed to the set of fields linearly through which the gap passes; and

an adapter to constrain location of media passing through the gap formed by the plurality of poles to the effective degaussing regions formed between the poles.

12. The apparatus as recited in claim 11, further comprising supplementary fixed poles of substantially different configuration than the plurality of poles and intended to produce any magnetic field direction not produced by the primary plurality of magnetic poles and associated magnetic fields.

13. The apparatus as recited in claim 11, further comprising an accessory for supplementary restriction of different media form factors to more effective regions of the degaussing fields for introducing media with magnetically attractive components into the field or extracting such media from the field.

14. A bulk degaussing method for erasing various sizes of magnetic media, comprising:

projecting magnetic flux across a gap with a plurality of fixed magnetic poles formed by an assembly of magnets and iron elements predisposed across a gap;

spacing of the poles at roughly equal intervals or sets of similar intervals across the gap;

forming a set of fields at staggered intervals across the width
of media passage, such that every point in media passing linearly through
10 the gap passes through either a field resulting from adjacent poles that
changes direction over the course of passage, or different fields from
different sets of adjacent poles that differ in direction, or both; and
constraining the location of media passing through the gap
15 formed by the plurality of poles to the effective degaussing regions formed
between the poles.